#
14

Passed March 28th. 1827
W. E. H

An
Inaugural Dissertation
On
Typhus Fever
By
Alexander Lowber
of Del

Typhus Fever.

As it is required of every student in order to obtain a degree from this Institution, to write an essay on some subject, connected with medical science; I have endeavoured to do so, however inadequate to such a performance, I may consider myself.

The disease, on which I have written, and now submit to your perusal, being one so fatal in foreign countries, and not less so where it makes its appearance amongst us, should be studied, and investigated by one more able to perform such an arduous task; however I hope that I will be excused by those who I know are willing to make every allowance for a student of medicine, whose experience is necessarily very limited. I have given what I consider the best method of combating a disease, which is always to be dreaded by those whose lot it is to see their fellow creatures, who

are so unfortunate as to become subject to its ravages.

However desperate the symptoms may appear we should never give up or forsake a patient even in the last moments; for cases apparently desperate have crowned the physician with the "laurels of victory."

Typhus fever as it is for the most part seen in this country being the effect of some other disease, the mode of cure must be evident, but this is not merely the species of which I intend to treat; but more particularly of the disease in its most malignant form, or as it usually denominated Typhus Gravior.

By some writers this disease is divided into Gravior, and Mitior, but I fully concur with Doctor Chapman in considering one merely an aggravated form of the other.

Typhus gravior comes on with great debility, and soreness of the muscles, severe pain in the

head back, and extremities; great throbbing of the temporal arteries with alternations of heat and cold; and flushings of the face terminating in fever.

The countenance, inflamed eye, and delirium, which attend this disease, indicate great determination to the head. In this disease the tongue is hard, furred, and brown or black, the teeth are covered with dark and fetid sordes; the skin is dry, the pulse is hard, small, quick, and sometimes corded; the breathing is laborious; and the breath is extremely offensive with frequent sighing: there is great heat and pain of the stomach with sometimes a vomiting of bilious matter, and constipation always attends the first stage of this disease.
The thirst also is generally unquenchable.

In the latter stage of this disease the discharges of fæces and urine become involuntary, and cold clammy sweats breake

out on different parts of the body, the pulse becomes tremulous, intermits, and sinks; the extremities grow cold; and there is coma, hickup, subsultus tendinum, picking at the bedclothes, and a low muttering delirium.

Hemorrhagies generally take place from the nose, mouth, and gums; there are petechiæ or purple spots which come out on different parts of the body with fetid stools, and in the end death terminates his sufferings.

But when the disease shows a tendency to terminate favourably; all the preceding symptoms change to a milder form; the pulse becomes softer and slower, the tongue and teeth clean, the febrile heat and thirst abates, and a moisture breaks out on the body; the stupor, subsultus tendinum, and delirium go off, and eruptions generally make

has appeared around the mouth.

Causes. The principal causes of this disease are marsh miasmata, cold, sudden grief, fear, intemperance want of sleep a low and poverous diet, and in fact whatever debilitates the system. A want of cleanliness, and confined air will also sometimes produce this fever.

This disease is also said to be contagious but I believe that it only becomes so in crowded, and ill-ventilated situations. It is a well established fact that contagion can be carried in the clothes of one person, and affect others while the person, who wears them, may remain free from the disease.

I have now given a short account of the symptoms and causes of typhus fever, and it only remains for me to detail the remedies, which are necessary for each stage of it but it is only my intention to enumerate such remedies as

have been the most approved.

Treatment. In commencing the treatment of typhus fever one leading indication presents itself, that is the evacuation of the stomach by an emetic. It not only becomes useful by cleansing the stomach of its noxious contents, but by producing a new action in restoring the natural temperature relieving the pain in the head and producing a diaphoresis. If emetics are administered in the advanced stage of the complaint, or after the fever has once commenced; they are highly injurious by aggravating all the symptoms.

After the fever has fully taken place, if the skin be hot and dry the pulse hard and corded venesection should be used, and repeated; if the first bleeding should not have the desired effect.

The next and one of the most important

remedies, which we have in our power of removing the disease is to cleanse the alimentary canal which is always loaded and constipated to relieve it is of the utmost importance: we should therefore resort to cathartics the best of which is calomel combined with Jalap or Rhubarb these besides evacuating the primæ viæ, are useful in removing accumulations or congestions in the liver, lungs, and brain.

But if these means should not fully answer the purpose, for which they are intended: enemata may be administered, and sometimes with great advantage.

The patients bowels should be kept open throughout the whole course of the disease, either by enemata or cathartics. Some practitioners recommend purging every day.

Cold water is a remedy which is very much used in Europe it has also been very

successfully employed in this country. It should be used when the skin is hot and dry, the pulse active, and when there is no sense of chilliness present, sponging is preferable to any other mode of applying it. The effects which this remedy is said to produce are a diaphoresis, and a mitigation of all unpleasant symptoms. I have never seen it employed in this disease but I have no doubt of its efficacy having seen it employed in other cases of fever; and as it is recommended by very high authority it certainly demands a trial.

Where there is great pain in the head, restlessness, and delirium, cups or leeches are found to be very useful, but if these should not procure relief cold applications should be employed, and frequently renewed until relief is obtained. If both these means should fail of procuring relief; the head should be shaved, and a blister should be applied.

Having sufficiently evacuated the primæ viæ, together with the use of the other remedies which have been enumerated, recourse should be had to diaphoretics for the purpose of relieving the inner thirst and constriction of the vessels on the surface of the body. For this purpose the mild diaphoretics are in general to be preferred to the more stimulating, one of the best is the saline or nitrous mixture.

One tablespoonful of this mixture may be given every hour or every two hours, according to the circumstances of the case. It may sometimes become useful to add the sweet spirits of nitre to the above mixture. This draught tranquilizes the stomach abates the thirst, and induces a gentle diaphoresis. Sweet spirits of nitre combined with antimonial wine is sometimes an excellent medicine for receiving fever.

Another very excellent remedy for producing a determination to the surface is cream of tartar and salt of tartar combined with a small quantity of ipecacuanha.

I have now mentioned the principal remedies, which are necessary for the removal of the first or inflammatory stage of typhus fever. In the second stage of this disease we must pursue a directly opposite plan of treatment, for here there is great prostration of strength, stupor, coldness of the extremities, a small, weak, and sometimes intermitting pulse. To overcome this stage we must resort to stimulants, which are calculated to arouse the system and on which alone the safety of the patient depends.

The most suitable stimulants now are the carbonate of ammonia or Camphor; but we will sometimes find one to suit, and we

such a case the other should be used; both of these may be given in the form of julep in the following manner.

℞. Carbon: ammonia — ʒi.
Gum Arab: — ℥ij.
Sacch: Alb: — ℥i.
Aqua — — — ℥vi. misce.

℞. Camphor — — ʒi.
Myrrh — — ʒss.
Sacch: Alb: — ʒij.
Aqua — — — ℥vi. misce.

Another very excellent and powerful stimulant is the turpentine mixture, which may be prepared in the following manner.

℞. Oleum: Terebinth. — — ʒi.
Gum Arab: — — — ʒi.
Tinct: Opii: — — — — ʒi.
Oleum menth: — gtt. xv
Aqua — — — ℥vi. misce.

The preceding mixtures may be given in the dose of one tablespoonful every two hours, or oftener in cases of emergency.

Opium is sometimes given in typhus fever as a stimulant; but I think that it should by no means be prescribed to the above medicines.

Wine is very useful in assisting the operations of the preceding remedies and the medicinal wine is far preferable to any other kind, it should always be used as it is found to be very palatable to the patient. As a change we may take brandy toddy, which is also a very useful stimulant; for a long use of the wine may excite a disgust to that article.

Blisters and sinapisms should at the same time be applied to different parts of the body; they are sometimes very important remedies, and should by no means be neglected.

The patient is sometimes unable to swallow

and then stimulating remedies such as wine or brandy may be substituted with great advantage.

Where oil of turpentine may be rubbed over the trunk and extremities with evident utility, it is sometimes one of the best means which we have in our power of stimulating the system and where all the above remedies fail, this mode of proceeding should be resorted to.

Where there are nervous symptoms present as subsultus tendinum, antispasmodics such as musk castor asafoetida and opium should be given.

Muriatic acid is very highly recommended by Doctor Caldwell in typhus fever. He gives it directly after evacuating the stomach and intestines of their noxious contents. The dose, in which he prescribes it, is about ten or twelve drops of the muriatic acid combined with five drops of laudanum, and repeated

every four hours gradually increasing it to twenty drops or sometimes even more.

Yeast is also recommended by some writers on this disease in the dose of a tablespoonful every two hours.

If a diarrhoea should take place which is frequently the case at the termination of the disease; it should by all means be checked, otherwise it may exhaust the system so much as to destroy the patient, for which purpose opium should be given.

If the patient, by pursuing the plan of treatment which I have given, should procure a cessation of the febrile symptoms, tonics, such as serpentaria, gentian, colombo, bark &c, should be given in order to prevent its return, if possible, and to strengthen the system.

In the inflammatory stage of typhus fever,

the drink should consist of such articles as are cooling, as lemonade, rice water, barly water, toast water &c; but in the latter stage of the disease it should consist of wine and water, porter, ale. &c.

The diet should be light and nourishing.

Throughout the whole course of the disease the patient should remain as quiet as possible, and all company, except such as are absolutely necessary, should be excluded.

The room should be freely ventilated, and fumigations of muriatic or nitric acid are very useful in purifying the air of the room.

Cleanliness should be strictly observed, and not only the bed and body linen should be frequently changed; but whenever a motion from the patient takes place it ought immediately to be removed.